

## SLOTTED CYLINDER ANTENNA

### ABSTRACT OF THE INVENTION

An antenna (100) for RF communications. The antenna includes a radiating member (102) which is substantially tubular so as to define a cavity (104) therein. The radiating member (102) is made of a conductive material having a non-conductive slot (106) extending from a first portion (108) of the radiating member (102) to a second portion (110). An impedance matching device (120) is electrically connected to the radiating member (102) via a conductor (134) to match an impedance of the radiating member (102) with an impedance of a signal source or an impedance of a load. The impedance matching device (120), the conductor (134), and at least a portion of the radiating member radiating element (102) can be formed from a single conductive sheet, or molded or extruded as a single conductive structure.